DEPARTMENT OF TRANSPORTATION

DIVISION OF ENGINEERING SERVICES Office of Structural Materials Quality Assurance and Source Inspection

Bay Area Branch 690 Walnut Ave.St. 150 Vallejo, CA 94592-1133 (707) 649-5453 (707) 649-5493



Contract #: 04-0120F4

Cty: SF/ALA Rte: 80 PM: 13.2/13.9

File #: 69.28

WELDING INSPECTION REPORT

Resident Engineer: Pursell, Gary **Report No:** WIR-008795 Address: 333 Burma Road **Date Inspected:** 23-Aug-2009

City: Oakland, CA 94607

OSM Arrival Time: 645 **Project Name:** SAS Superstructure **OSM Departure Time:** 1845 **Prime Contractor:** American Bridge/Fluor Enterprises, a JV

Contractor: Zhenhua Port Machinery Company, Ltd (ZPMC), Changxing Island **Location:** Shanghai, China

CWI Name: CWI Present: Yes No **Inspected CWI report:** Yes N/A **Rod Oven in Use:** Yes No No N/A N/A **Electrode to specification:** Yes No Weld Procedures Followed: Yes No N/A N/A **Qualified Welders:** Yes No **Verified Joint Fit-up:** Yes No N/A N/A Yes N/A **Approved Drawings:** Yes No **Approved WPS:** No Yes No N/A **Delayed / Cancelled:**

Bridge No: 34-0006 **Component: OBG** Trail Assembly

Summary of Items Observed:

On this day CALTRANS OSM Quality Assurance Inspector (QA) S. Manjunath. Math was present during the times noted above for observations relative to the fabrication of the SAS Superstructure being performed by Zhenhua Port Machinery Company (ZPMC) at Changxing Island in Shanghai, China. QA observed and/or found the following work in progress:

Orthotropic Box Girder (OBG) Trial Assembly Areas

Lift 3 (East) Segment 3AE

This Quality Assurance (QA) Inspector witnessed final tension verification for Lower Chevron splice plate as they were deformed due to the angle fitting and difference in the shim plate thickness which was incorporated earlier same has been rectified and offered for tension verification. Inspected 10% on a random basis and found the tension to be in general compliance. Witnessed at PP 19 west side Splice plate tension and at PP 21 East Side splice plate tension. Bolt sizes used at PP 19 were M22 x 75 RC Set# DHGM220005 and final Torque required is 473 N-m and M22 x 70 RC Set# DHGM220004 and final Torque required is 453 N-m. Bolt sizes used at PP 21 were M22 x 90 RC Set# DHGM220088 and final Torque required is 500 N-m and M22 x 70 RC Set# DHGM220004 and final Torque required is 453 N-m. Manual Torque wrench is been used with Sr. No. X02-578.

Lift 3 (East) Segment 3AE

This Quality Assurance (QA) Inspector witnessed Turn of Rotation 180 degree for Lower Chevron angles (X3D).

WELDING INSPECTION REPORT

(Continued Page 2 of 2)

Rotation of inside Lower Chevron at PP 19 and PP 21 at Bike Path. Inspected 10% on a random basis and found the tension to be in general compliance. Witnessed at PP 19 west side Splice plate tension and at PP 21 East Side splice plate tension. Bolt sizes used at PP 19 and PP 21 were M22 x 65 RC Set# DHGM220033 and final Torque required is 470 N-m and M22 x 75 RC Set# DHGM220005 and found rotation of nut been carried out for 1800.

Lift 3 West

This Quality Assurance (QA) Inspector witnessed final tension verification for Cable Tray structure bolted to Bottom panel T-Rib structure total in 10 Nos. each at North and South side for Segment Lift 3 West (3AW to 4BW) between PP 24 to 28. Inspected 10% on a random basis and found the tension to be in general compliance. Bolt sizes used are M ¾ x 2 ¼ RC Lot No. DHG60571 and final Torque required is 393 N-m. Manual Torque wrench is been used with Sr. No. X02-599.

Lift 2 (West) Segment 2AW and 2BW

This Quality Assurance (QA) Inspector witnessed final tension verification for Traveler Rails fitted at Counter Weight Lower Chevron splice plate. Inspected 10% on a random basis and found the tension to be in general compliance. Witnessed bolts tension verification from PP 13, 14, 15, 18 and 19. Noticed Gap between the faying surface of Side Panel and Traveler rail bracket and thus tension verification not accepted. Bolt sizes used were M22 x 90 RC Set# DHGM220048 and final Torque required is 500 N-m; M22 x 120 RC Set# DHGM220051 and final Torque required is 433 N-m; M22 x 85 RC Set# DHGM200003 and final Torque required is 346 N-m and M22 x 160 RC Set# DHGM200006 and final Torque required is 340 N-m. Manual Torque wrench is been used with Sr. No. X02-578.

Unless otherwise noted, all work observed on this date appeared to generally comply with applicable contract documents.

Summary of Conversations:

No relevant conversations.

Comments

This report is for the purpose of determining conformance with the contract documents and is not for the purpose of making repair or fit for purpose recommendations. Should you require recommendations concerning repairs or remedial efforts please contact, who represents the Office of Structural Materials for your project.

Inspected By:	Math, Manjunath	Quality Assurance Inspector
Reviewed By:	Carreon, Albert	QA Reviewer